

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alcassedan, Virginia 22313-1450 www.emplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,606	06/20/2006	Shigeru Sasaki	023174-0169	2621
22428 7590 01/09/2012 FOLEY AND LARDNER LLP			EXAMINER	
SUITE 500			TRUONG, DUC	
3000 K STRE			ART UNIT	PAPER NUMBER
	,		1765	
			MAIL DATE	DELIVERY MODE
			01/09/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.	Applicant(s)	Applicant(s)		
10/583,606	SASAKI ET AL.			
Examiner	Art Unit			
DUC TRUONG	1765			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,

WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

<ul> <li>Extensions or time may be available under the provisions of 37 CFH 1,130(a). In no event, nowever, may a reply be timely tilled after SIX (6) MONTHS from the mailing date of this communication.</li> </ul>
altrices of the control of the contr
Status
1) Responsive to communication(s) filed on 21 November 2011.
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.
3) An election was made by the applicant in response to a restriction requirement set forth during the interview of
; the restriction requirement and election have been incorporated into this action.
4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
5) Claim(s) 1-20 is/are pending in the application.
5a) Of the above claim(s) 3 and 10-20 is/are withdrawn from consideration.
6) Claim(s) is/are allowed.
7)⊠ Claim(s) 1.2 and 4-9 is/are rejected.
8) Claim(s) is/are objected to.
9) Claim(s) are subject to restriction and/or election requirement.
Application Papers
10) ☐ The specification is objected to by the Examiner.
11) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
12) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
a)□ All	b) ☐ Some * c) ☐ None of:			
1.	Certified copies of the priority documents have been received.			
2.	Certified copies of the priority documents have been received in Application No			
3.	Copies of the certified copies of the priority documents have been received in this National Stage			
	application from the International Bureau (PCT Rule 17.2(a)).			
* Coo th	a attached datailed Office action for a list of the certified copies not received			

See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)		
Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)	
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	Paper No(s)/Mail Date	
3) Information Disclosure Statement(s) (PTC/SB/65)	5). Notice of Informal Patent Application	
Paper No/s\/Mail Date	6) Other:	

Page 2

Application/Control Number: 10/583,606

Art Unit: 1765

## DETAILED ACTION

Applicant's arguments filed 11/21/11 have been fully considered but they are not persuasive. The Response submitted by Applicant does not overcome the rejection made by examiner in the last office action.

Claims 1,2 and 4-9 with the combination of formulae (2a) and (2b) as the elected species are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 2003/0096149 of record on 1449.

The rejection is maintained for the reasons as stated in the last Office action and for the following reasons:

Applicant's arguments are based on the claimed components in that the reference does not disclose the use of a methanol in the claimed direct methanol type fuel cell.

However, Applicant is correct in stating that the methanol is a source to form hydrogen gas by stating that "---supplying hydrogen gas obtained by reforming a low MW hydrocarbon such as methanol---". Therefore, methanol is an indirect source of hydrogen gas in said composition. Further, Applicant's arguments are also raised a new problem cited below:

## Claim Rejections - 35 USC § 112

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 10/583,606

Art Unit: 1765

Claim 1 is indefinite in that it does not disclose the relationships between methanol and a polymer electrolyte and how it works since it is not understood that the methanol is a direct source or indirect source and how they relate to each other.

Further, one of ordinary skill in the art would not be motivated to form the claimed direct methanol type fuel cell based on the claimed requirements.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC TRUONG whose telephone number is (571)272-1081. The examiner can normally be reached on Monday-Friday.

Art Unit: 1765

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duc Truong/ Primary Examiner, Art Unit 1765